

14 March 1997

Re: NEPA Call-In Technical Inquiry 0034 - Decommissioning of
Laboratories

Dear NEPA Call-In User:

This letter is in response to your February 24, 1997 request for information on the decommissioning of chemistry laboratories. Specifically, your facility houses agencies with chemistry labs and there is no set procedure to move or decommission them. You are planning to write procedures for your facility and are looking for examples of guidance documents or instructions for decommissioning labs. You want to ensure personnel are properly moving the lab and cleaning the old space.

NEPA Call-In contacted the Industrial Hygienist, GSA Public Building Service (PBS) Office of Property Management, formerly the Safety and Environmental Management Division. The Industrial Hygienist stated their office does not have guidance on decommissioning chemistry laboratories and indicated GSA does not have specific guidance on this issue.

We then contacted Mr. Gail Brinkerhoff, Office of Health Compliance Assistance, Occupational Safety and Health Administration (OSHA), (202) 219-9308. Mr. Brinkerhoff stated OSHA is concerned with standards for protecting workers, but did not know of any written guidelines for decommissioning a lab. NEPA Call-In also contacted Mr. Long Loo, Office of Safety, OSHA, (202) 219-8061, who did not have any information but suggested we review Title 29 Code of Federal Regulations (CFR) 1910.1450, "Occupational Exposure to Hazardous Chemicals in Laboratories" on the OSHA home page (www.osha-slc.gov). We reviewed the document and did not find any specific information on lab decommissioning. However, 29 CFR 1910.1450, Appendix A, "National Research Council Recommendations Concerning Chemical Hygiene in Laboratories (Non-Mandatory)" (enclosed), provides general health and safety practices for handling chemicals in a laboratory which can be applied to your decommissioning project.

Additionally, Appendix B, "References (Non-Mandatory)" (enclosed) provides a list of references which may be helpful.

NEPA Call-In contacted Mr. Mike Spillane, Occupational Safety & Health Branch, National Institutes of Health (NIH), (301) 496-2960. Mr. Spillane stated NIH does not have a written procedure for the decommissioning of a laboratory; however, there are general procedures that are followed. For biological labs, the scientists working in the lab ensure everything has been decontaminated. Specific decontamination depends upon the biological contents of the lab. For both biological and chemical labs, all counters are wiped down and the labs are generally emptied. All clean up is performed by scientific staff because they are familiar with the chemicals or other materials used in the lab. Finally, a walk through is done to ensure all potentially hazardous materials have been removed. Mr. Spillane also stated he spoke with his colleagues in the Occupational Safety and Health Branch who did not know of any written documents offering guidance on decommissioning labs. Mr. Spillane suggested we contact Dr. Randall Morin, Safety Branch, Fort Dietrich, (301) 846-1451.

We contacted Dr. Morin who stated Fort Dietrich has a written document providing guidance for the relocating of a biological lab. However, this document is primarily used for bio-level 3 labs, is specific to Fort Dietrich, and not releasable to NEPA Call-In. Bio-level 3 labs refer to labs containing human pathogens in the aerosol form which are capable of causing illness. Dr. Morin did not know of any other instructional documents on lab decommissioning. He indicated when a lab is decommissioned, the actual clean up is very subjective because many of the chemicals or other potential hazards are difficult to detect. Clean up will depend on the specific chemicals used or present in the lab.

NEPA Call-In contacted Mr. Ray Mastnjak, Army Environmental Center, Aberdeen Proving Ground, (410) 671-2471. Mr. Mastnjak suggested we review the Center for Disease Control publication "Biosafety in Microbiological and Biomedical Laboratories" available on the internet at www.orcbs.msu.edu/biological/bmbl/bmbl-1.htm (enclosed). This document does not contain specific guidance on decommissioning, but outlines measures that should be taken when working with biohazards.

We then contacted Ms. Lynn Myers, Office of Safety and Health, Centers for Disease Control (CDC), (404) 639-3235, who stated they do not have any guidance documents for decommissioning labs, but stated "Biosafety in Microbiological and Biomedical Laboratories" is an excellent biosafety manual for working with biohazards.

NEPA Call-In contacted a representative of the Chemical Transportation Emergency Hotline (CHEMTREC), Chemical Manufacturers Association, (703) 741-5000, who stated they do not have a guidance document addressing the decommissioning of labs. The representative suggested we contact the Colorado State Emergency Response Center.

We then contacted Ms. Kathy Hotovac, Hazardous Material and Waste Management Division, Colorado State Emergency Response Center, (303) 692-3300, who stated they did not have guidance for lab decommissioning.

NEPA Call-In contacted Mr. Ray Kelling, Lab Director, Chemistry Laboratory, Division of Water Quality, North Carolina Department of Environment, Health, and Natural Resources, (919) 733-3908. Mr. Kelling stated he was not aware of any written guidance on decommissioning a chemistry lab. However, his lab relocated a few years ago. The lab was cleaned and a chemical inventory was performed. Any chemicals that were no longer useful to the lab were donated to local universities, high schools, and laboratories. The remaining chemicals were transported to the new location or disposed of according to the Material Safety Data Sheet (MSDS) guidance and governing.

We also contacted the following who were unable to provide guidance documents on the decommissioning of labs:

1. Public Information Center, Environmental Protection Agency (EPA), (202) 260-2080;
2. Ms. Marty Graves, Head Librarian, Resource Conservation and Recovery Act (RCRA) Information Center, (703) 603-9230;
3. Mr. Thomas Hutson, RCRA Hotline, (800) 424-9346;
4. National Technical Information Service, (800) 553-6847;
5. Lieutenant Colonel Kathy Ware, Laboratory Service Branch, Armstrong

Laboratory, Brooks AFB, Texas, (210) 536-2411;

6. Mr. Tom Mersky, Program Director, Technology Communications, Center for Hazardous Materials Research, (412) 826-5321;
7. American Society for Testing and Materials, (215) 299-5400;
8. Ms. Michelle Hedrick, Chief, Safety and Environmental Office, Phillips Laboratory, Kirtland AFB, New Mexico, (505) 846-4574;
9. Mr. Stuart Burns, Safety Office, Naval Research Laboratory, (202) 767-2232;
10. American Chemical Society, (800) 753-4227;
11. American Institute of Chemical Engineering (800) ATCHEME; and
12. Mr. Guy Camomilli, Manager, Safety, Reliability, and Quality Assurance, Dynamac Corporation, Kennedy Space Center, (407) 853-7703.

In summary, NEPA Call-In was unable to locate any specific guidance documents on the decommissioning of a chemistry lab. Each lab and organization we contacted stated, due to the differences in labs, each is decommissioned according to the specific components of the lab. Personnel working in the labs play an integral part in decommission because of their knowledge of the specific components of the lab.

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Sincerely,

(Original Signed)

NEPA Call-In Researcher